



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0388; Project Identifier MCAI-2020-01604-T; Amendment 39-22088; AD 2022-13-02]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. This AD was prompted by reports of the failure of certain primary ejector fuel feed flexible hoses, which may have a thinner liner than specified by design requirements, and are therefore more susceptible to cracking. This AD requires replacing the hoses. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For Bombardier service information identified in this final rule, contact

MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email thd.crj@mhjrj.com; internet <https://mhjrj.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at www.regulations.gov by searching for and locating Docket No. FAA-2022-0388.

Examining the AD Docket

You may examine the AD docket on the Internet at www.regulations.gov by searching for and locating Docket No. FAA-2022-0388; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Joseph Catanzaro, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7366; email 9-avs-nyacocos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2020-03, dated March 5, 2020 (TCCA AD CF-2020-03) (also referred to after this as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-

600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0388.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2C11 (Regional Jet Series 550), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the *Federal Register* on April 1, 2022 (87 FR 19032). The NPRM was prompted by reports of the failure of certain primary ejector fuel feed flexible hoses, which may have a thinner liner than specified by design requirements, and are therefore more susceptible to cracking. The NPRM proposed to require replacing the hoses. The FAA is issuing this AD to address a possible fuel hose leak, which could cause a lateral imbalance with an adverse effect on the airplane's controllability, or result in a dual inflight engine shutdown (IFSD). See the MCAI for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from The Air Line Pilots Association, International (ALPA), who supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will

increase the economic burden on any operator. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information under 1 CFR Part 51

Bombardier has issued Service Bulletin 670BA-28-040, dated September 30, 2019. This service information describes procedures for, among other actions, replacing any primary ejector fuel feed flexible hose, (P/N) CC670-62022-3 and CC670-62022-4, having serial numbers 001 through 2470 inclusive. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 457 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
12 work-hours X \$85 per hour = \$1,020	\$2,872	\$3,892	\$1,778,644

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-13-02 MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.): Amendment 39-22088; Docket No. FAA-2022-0388; Project Identifier MCAI-2020-01604-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) airplanes identified in paragraphs (c)(1) through (3) of this AD, certificated in any category.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) and CL-600-2C11 (Regional Jet Series 550) airplanes, serial numbers 10002 through 10325 inclusive.

(2) Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15263 inclusive.

(3) Model CL-600-2E25 (Regional Jet Series 1000), serial numbers 19001 through 19013 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel system.

(e) Unsafe Condition

This AD was prompted by reports of the failure of certain primary ejector fuel feed flexible hoses, which may have a thinner liner than specified by design requirements, and are therefore more susceptible to cracking. The FAA is issuing this AD to address a possible fuel hose leak, which could cause a lateral imbalance with an adverse effect on the airplane's controllability, or result in a dual inflight engine shutdown (IFSD).

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

At the applicable time specified in figure 1 to paragraph (g) of this AD: Replace each hose having part number (P/N) CC670-62022-3 and P/N CC670-62022-4 and serial number 001 through 2470 inclusive, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-28-040, dated September 30, 2019.

Figure 1 to paragraph (g) – Compliance Schedule

Airplane Model	Compliance Time
CL-600-2C10 and CL-600-2C11 airplanes, serial numbers 10005 through 10065 inclusive, that have accumulated less than 31,200 flight hours since Bombardier Service Bulletin (SB) 670BA-28-008 was incorporated	Prior to the accumulation of 40,000 flight hours since SB 670BA-28-008 was incorporated
CL-600-2C10 and CL-600-2C11 airplanes, serial numbers 10005 through 10065 inclusive, that have accumulated 31,200 flight hours or more since SB 670BA-28-008 was incorporated	Within 8,800 flight hours after the effective date of this AD
CL-600-2C10 and CL-600-2C11 airplanes, serial numbers 10002 through 10004 inclusive and 10066 through 10325 inclusive, that have accumulated less than 31,200 total flight hours as of the effective date of this AD	Prior to the accumulation of 40,000 total flight hours
CL-600-2C10 and CL-600-2C11 airplanes, serial numbers 10002 through 10004 inclusive and 10066 through 10325 inclusive, that have accumulated 31,200 total flight hours or more as of the effective date of this AD	Within 8,800 flight hours after the effective date of this AD
CL-600-2D15 and CL-600-2D24 airplanes, serial numbers 15001 through 15263 inclusive, that have accumulated less than 31,200 total flight hours as of the effective date of this AD	Prior to the accumulation of 40,000 total flight hours
CL-600-2D15 and CL-600-2D24 airplanes, serial numbers 15001 through 15263 inclusive, that have accumulated 31,200 total flight hours or more as of the effective date of this AD	Within 8,800 flight hours after the effective date of this AD
CL-600-2E25 airplanes, serial numbers 19001 through 19013 inclusive, that have accumulated less than 31,200 total flight hours as of the effective date of this AD	Prior to the accumulation of 40,000 total flight hours
CL-600-2E25 airplanes, serial numbers 19001 through 19013 inclusive, that have accumulated 31,200 total flight hours or more as of the effective date of this AD	Within 8,800 flight hours after the effective date of this AD

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or MHI RJ Aviation ULC's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2020-03, dated March 5, 2020, for related information. This MCAI may be found in the AD docket on the Internet at www.regulations.gov by searching for and locating Docket No. FAA-2022-0388.

(2) For more information about this AD, contact Joseph Catanzaro, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7366; email 9-avs-nyaco-cos@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 670BA-28-040, dated September 30, 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact MHI RJ Aviation Group, Customer Response Center, 3655 Ave. des Grandes-Tourelles, Suite 110, Boisbriand, Québec J7H 0E2 Canada; North America toll-free telephone 833-990-7272 or direct-dial telephone 450-990-7272; fax 514-855-8501; email thd.crj@mhij.com; internet <https://mhij.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 10, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.